

Scientific Program

Webinar on Materials Science & Nanotechnology

Monday
June 14, 2021

Day 1 - June 14, 2021

11:00 - 11:10 Introduction

Keynote Presentation

11:10 - 11:40 Bottom – up nanointegration of semiconductor nanowires into highly sensitive bionanosensors using shape memory nano tools
Svetlana von Gratowski, Institute of Radio-engineering and Electronics of RAS, Russia

11:40 - 12:10 Functional nanoparticles for Immunochromatographic Biosensors
María Carmen Blanco - Lopez, University of Oviedo, Spain

Oral Presentation

12:10 - 12:35 Transport property of $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$ at Heavy Tin Doping ($0.1 < x < 0.4$)
Zohra Ali Gebrel, University of Sabratha, Libya

12:35 - 13:00 Purification of bacterial cellulose in supercritical media for biomedical applications: lipopolysaccharides removal and structural aspects
Olga I. Kiselyova, Moscow State University, Russia

Lunch (13:00 - 13:30)

13:30 - 13:55 Simple CNTs based sensor structure:from material to device
Nahida Musayeva, Institute of Physics, ANAS, Azerbaijan

13:55 - 14:20 Self Assembled Monolayers of Zeolite for a rapid detention of cancer and inflammatory cells
Rossella De Marco, University of Udine, Italy

14:20 - 14:45 Nanobiomaterials for Biosensors Development:MicroTechnology limitations and Norms
Abdelghani Adnane, University of Carthage, Tunisia

14:45 - 15:10 Copolymeric polyamidoamines as flame retardants for cotton
Alessandro Beduini, Università degli Studi di Milano, Italy

15:10 - 15:35 Scope and future prospects of Friction Stir spot welding of Al 6061 Alloy
Vijay Navaratna Nadakuduru, Malaviya National Institute of Technology Jaipur, India

15:35 - 16:00 Antifungal activity of polyhexamethyleneguanidine derivatives introduced into biodegradable polymers
Joanna Swiatczak, Nicolaus Copernicus University in Torun, Poland

16:00 - 16:25 Transport properties of mechanically mixed $\text{Bi}_x\text{Sb}_{2-x}\text{Te}_3$ – ABS composites
Zacharias Viskadourakis, Foundation for Research and Technology (FORTH)- (IESL), Greece

16:25 - 16:50 Predicting the damage of thermally degraded CFRP by means of multivariate data analysis
T. Vetter, Universität der Bundeswehr München, Germany

16:50 - 17:15 Sub-nano ordering in Polymer
Mohammad Changez, A' Sharqiyah University, Oman

17:15 - 17:40 Behavior of expanded polystyrene EPS in geotechnical applications
Alexandra Ossa, Universidad Nacional Autonoma de Mexico

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| 17:40 - 18:05 | Nanocellulose as a future bio-based material
Rogério Navarro , PUC-Rio, Rio de Janeiro, Brazil |
| 18:05 - 18:30 | Synthesis of biobased cycloaliphatic epoxy monomers derived from nopol and the study of their cationic photopolymerization
Ricardo Acosta Ortiz , Centro de Investigación en Química Aplicada, Mexico |
| 18:30 - 18:55 | On the use of ozawa/flynn/wall method to determine aging activation energy for elastomer
Sudhir Bafna , Raytheon Missiles and Defense, USA |

End of Day 1 Sessions

Tuesday
June 15, 2021

Day 2 - June 15, 2021

Oral Presentation

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| 10:30 - 11:00 | Advanced BIObased polyurethanes and fibres for the autoMOTIVE industry with increased environmental sustainability
Agnieszka Sitarz , Greennovention, Poland |
| 11:00 - 11:25 | Wood coated with polyvinyl acetate/reduced graphene oxide-poly diallyl dimethyl ammonium chloride composite reveals improved hydrophobicity
Haradhan Kolya , Jeonbuk National University, Republic of Korea |

Keynote Presentation

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| 11:25 - 11:55 | Nanostructured electrocatalysts for low temperature PEM fuel cells
Vladimir Fateev , National Research Center of Kurchatov Institute, Russia |
| 11:55 - 12:25 | Optimization of PVP fibers by electrospinning for sensing applications
Angela Malara , Mediterranea University of Reggio Calabria, Italy |

Oral Presentation

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| 12:25 - 12:50 | Synthetic methodologies and study of thermosetting resins obtained from biobased and/or non-toxic compounds for the recovery of critical metals
Oye Auke Ruth , University of Montpellier, France |
| 12:50 - 13:15 | Swelling kinetics and thermal behavior of hydrogels composed of 2-Ethyl-hexyl acrylate and isobornyl acrylate
Ahlam Benkhelifa , University Abou Bekr belkaid Tlemcen, Algeria |

Lunch (13:15 - 13:45)

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| 13:45 - 14:00 | Novel ImmunoFET based on impedance spectroscopy for Salivary TNF - α detection: Application for heart failure
Hamdi Ben Halima , University of Lyon, France |
| 14:00 - 14:25 | Drop casting method for wearable sensor production
Suat Cetiner , Kahramanmaraş Sutcu Imam University, Turkey |

Webinar on
**Materials Science &
Nanotechnology**

**Tuesday
June 15, 2021**

14:25 - 14:50 **A Pilot Study on Microalgal - based Biopolymers and Nano/Microplastics**
Cesar Cunha, University of Madeira, Portugal

Poster Presentation

14:50 - 15:05 **ReaxFF force field development and application for toluene adsorption on MnMO_x (M=Cu, Fe, Ni) catalysts**
Vjeran Gomzi, University of Zagreb, Croatia

15:05 - 15:20 **Biodegradation and mechanical properties of cellulose/mango starch bioplastic**
Rodolfo Rendon, CEPROBI-IPN, Mexico

15:20 - 15:35 **Self - Referenced Surface Plasmon Resonance Sensor Based on Diffraction Grating**
Evdokiya Belina, Bulgarian academy of sciences, Bulgaria

15:35 - 15:50 **Synthesis of active biodegradable starch-based plastic and migration of vitamin B3**
Dunja Arsenijević, Petnica Science Center, Serbia

15:50 - 16:05 **Rheological properties and thermal stability of annealed film of poly lactic acid**
Assia Zennaki, Abou Bekr Belkaid University, Algeria

Oral Presentation

16:05 - 16:30 **Designed nanostructured composites with tailored mechanical and electrical performance: the influence of carbon nanotubes and block copolymers**
A. Araujo, INEGI, Portugal

End of Day 2 Sessions